

In the Claims:

Please amend Claims 1, 12, and 14 as indicated below. The status of all pending claims is as follows:

1. (Currently Amended) A magnetic disk apparatus comprising:

a cipher key memory unit which stores a single cipher key used for encoding and decoding data;

a cipher encode unit which encodes data input via an interface from an upper apparatus using the cipher key stored in said cipher key memory unit, the cipher encode unit recording the encoded data onto a record medium;

a cipher decode unit which decodes the encoded data read out from the record medium using the cipher key stored in said cipher key memory unit, the cipher decode unit outputting the decoded data via the interface to the upper apparatus; and

a cipher key change unit which cancels said cipher key stored in said cipher key memory unit and changes the cipher key used for decoding the data stored in the record medium the data encoded and stored in the record medium into another key which cannot be decoded.

2. (Previously Presented) The magnetic disk apparatus according to claim 1, wherein

the cipher key memory unit stores a predefined cipher key written at a stage of manufacturing the apparatus.

3. (Original) The magnetic disk apparatus according to claim 1, wherein the cipher key memory unit is a nonvolatile memory.

4. (Original) The magnetic disk apparatus according to claim 1, wherein the cipher key memory unit is a medium area other than a user recording area of the record medium.

5. (Previously Presented) The magnetic disk apparatus according to claim 1, wherein

the cipher key change unit changes the cipher key stored in the cipher key memory unit in response to a command for discarding all of the data residing in a user recording area of the record medium.

6. (Original) The magnetic disk apparatus according to claim 1, wherein the cipher key change unit changes the cipher key in the cipher key memory unit in response to a special command other than a command system for the upper apparatus.

7. (Original) The magnetic disk apparatus according to claim 1, wherein the cipher key change unit changes the cipher key in the cipher key memory unit in response to a special command from a cipher key change application installed in the upper apparatus.

8. (Previously Presented) The magnetic disk apparatus according to claim 1, wherein the cipher key change unit changes the cipher key in the cipher key memory unit in response to a special command from a cipher key change application installed by the upper apparatus via a network.

9. (Original) The magnetic disk apparatus according to claim 1, wherein the cipher key change unit changes the cipher key in the cipher key memory unit by recognizing a physical event manipulation in the apparatus.

10. (Previously Presented) The magnetic disk apparatus according to claim 1, wherein the cipher key change unit changes the cipher key by generating a new cipher key through a process of shuffling of the cipher key stored in the cipher key memory unit.

11. (Previously Presented) The magnetic disk apparatus according to claim 1, wherein

the cipher key change unit changes a cipher key stored in the cipher key memory unit into another cipher key added to a cipher key change command from the upper apparatus.

12. (Currently Amended) A cipher processing method for a magnetic disk apparatus, comprising:

a cipher key memory step of storing in a cipher key memory unit a single cipher key used for encoding and decoding data;

an encoding/recording step of converting data input via an interface from an upper apparatus into encoded data using the cipher key stored in said cipher key memory unit, and storing the encoded data onto a record medium;

a decoding/readout step of decoding the encoded data read out from the record medium using the cipher key stored in the memory unit, and outputting the decoded data via the interface to the upper apparatus; and

a cipher key change step of cancelling said cipher key stored in said cipher key memory unit and changing the data encoded and stored in a record medium into another cipher key used in the encoding/recording step which cannot be decoded.

13. (Previously Presented) The cipher processing method for a magnetic disk apparatus according to claim 12, wherein

the cipher key change step includes changing the cipher key stored in the cipher key memory unit in response to a command for discarding all of the data residing in a user recording area of the record medium.

14. (Currently Amended) A program operable to cause a computer incorporated in a magnetic disk apparatus to execute:

a cipher key memory step of storing in a cipher key memory unit a single cipher key used for encoding and decoding data;

an encoding/recording step of converting data input via an interface from an upper apparatus into encoded data using the cipher key stored in said cipher key memory unit, and storing the encoded data onto a record medium;

a decoding/readout step of decoding the encoded data read out from the record medium using the cipher key stored in the memory unit, and outputting the decoded data via the interface to the upper apparatus; and

a cipher key change step of cancelling said cipher key stored in said cipher key memory unit and changing the data encoded and stored in a record medium into another cipher key-used in the encoding/recording step which cannot be decoded.

15. (Previously Presented) The program according to claim 14, wherein the cipher key change step includes changing the cipher key stored in the cipher key memory unit in response to a command for discarding all of the data residing in a user recording area of the record medium.